

CSIRO ePublish Repository

Dublin Core Application Profile

Introduction

This is a dummy guidance document indicating how to profile of a set of vocabularies ([Dublin Core Terms](#), [FOAF](#) principally but those they utilise and others too) using the [Dublin Core Application Profile](#) methodology for the purpose of making dummy resources for the CSIRO ePublish Catalogue of academic works.

The purpose of creating this dummy profile is to test the power of the [Profile Description Ontology](#) at representing a particular community's - the Dublin Core community - method of profile creation.

This dummy has been created during the operations of the [W3C's Dataset Exchange Working Group](#) by members of that Working Group.

Scope

This document describes the why and what of the CSIRO ePublish Dublin Core Application Profile. Other resources implement this profile's requirements according to different constraint languages. See:

1. <http://linked.data.gov.au/dataset/CSIRO-ePub-DCAP/constraints-dcap-syntax.txt>
 - Full constraints in DSP constraint language
2. <http://linked.data.gov.au/dataset/CSIRO-ePub-DCAP/constraints.ttl>
 - Full constraints in RDF

Guidance

The purpose of the this (dummy) Application Profile is to ensure that each *Record* in the CSIRO ePublish Repository contains a minimum set of metadata fields and relations to other objects (*Authors & Publishers*) whose minimum metadata fields are specified too.

In general, a *Record* needs basic library index-style properties such as *title*, *subjects* (keywords) specified according to the Dublin Core Terms [DCTERMS] vocabulary and *Author* and *Publisher* objects need only simple name and contact (email) properties defined according to the FOAF [FOAF] vocabulary.

The Dublin Core Description Set Profiles syntax [DCDSP] is used to precisely define the specific object and property constraints in an abstract syntax (see resource 1. above in Scope) and a technology-specific implementation is also given (see resource 2. above in Scope), such as the requirement to include *one or more Authors* for a *Record* and that each *Author* must, in turn have a *given name* and a *family name*.

Creating a *Record*

Files containing *Records* (and their necessary dependents, *Author* and *Publishers*) can be presented in any one of several forms that the CSIRO ePublish Repository can validate and ingest. These forms are:

- XML file – a text format adhering to the DSP
 - To be validated using schematron [SCH] rules based on the DSP constraints (1. In Scope)
- RDF file – a text file in Turtle, RDF/XML or JSON-LD formats
 - To be validated using constraints.ttl
- Excel – a Microsoft Excel Workbook containing a Worksheet called “Record” with a *Record* per row with properties per columns. *Author* and *Publishers* are contained, one per row in worksheets called “Authors” and “Publishers” and *Records* reference them.
 - To be validated using custom application code within the CSIRO ePublish Repository

Submitting a record

XML, RDF or Excel files can be submitted to the CSIRO ePublish Repository’s “Create Record” web form. From there, the relevant validation mechanism will be run against them and results reported to the submitter.

References

[DCDSP]

[*Description Set Profiles: A constraint language for Dublin Core Application Profiles.*](#)

Nilsson, Mikael. 2008-03-31. DCMI Working Draft. URL:

<http://dublincore.org/documents/dc-dsp/>

[DCTERMS]

[*DCMI Metadata Terms.*](#) Dublin Core metadata initiative. 14 June 2012. DCMI

Recommendation. URL: <http://dublincore.org/documents/dcmi-terms/>

[FOAF]

Dan Brickley; Libby Miller. [*FOAF Vocabulary Specification 0.99 \(Paddington Edition\).*](#) 14

January 2014. URL: <http://xmlns.com/foaf/spec>

[SCH]

[*ISO/IEC 19757-3:2016.*](#) International Organization for Standardisation. Information technology -- Document Schema Definition Languages (DSDL) -- Part 3: Rule-based validation – Schematron. January 2016. URL: <https://www.iso.org/standard/55982.html>